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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413				
EXAMINER				
VENKAT, JYOTHSNA A				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/690,563

**Applicant(s)**

LEGRAND, FREDERIC

**Examiner**

JYOTHSNA A. VENKAT

**Art Unit**

1615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-59 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-59 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

Receipt is acknowledged of remarks filed on 3/12/08. Claims 1-59 are examined in the application. In view of common ownership statement that U.S. Patent Application No. 10/690,563 and U.S. Patent Application Publication No. 2004/0074015 were, at the time the invention of U.S. Patent Application No. 10/690,563 was made, commonly owned by L'Oreal, the rejection of claims 1-59 under 35 U.S.C. 103(a) as being unpatentable over the combination of U. S. patent '627 and PGPUB 20040074015 (PGPUB '015) is hereby withdrawn.

#### ***Double Patenting***

Claims 1-59 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-57 and 63-75 of copending Application No. 10/451,409 in view of U. S. Patent 4,927,627.

The instant application is claiming emulsion comprising oxidizing agent, surfactant, fatty alcohol and amphiphilic polymer and stabilizer. Copending application is also claiming oxidizing composition comprising oxidizing agent and amphiphilic polymer with hydrophobic unit and stabilizer. Co-pending application is claiming genus belonging to "amphiphilic polymer" and also the same amphiphilic polymer claimed in the instant application. Thus the genus claims in the co-pending application anticipates the species and when the claims are to species belonging to amphiphilic polymer in the co-pending application then both are same. Copending application is not to emulsions, but to compositions and copending application is not claiming fatty alcohol or surfactant. However patent teaches oil in water emulsions using hydrogen peroxide, fatty alcohol and surfactant. One of ordinary skill in the art would prepare compositions of 10/451,409 and add fatty alcohol and surfactant and use in the form of emulsions expecting that the

emulsions are stable over long time in view of the amphiphilic polymer and the emulsions also exhibit improved depth of brightness.

This is a provisional obviousness-type double patenting rejection.

***Response to Arguments***

Applicant's arguments filed 3/12/08 have been fully considered but they are not persuasive.

Applicant's traverse the provisional rejection and point out that the provisional rejection, at least because no actual double patenting circumstance can arise until a patent issues from the cited application and since the above copending application is still under consideration, there is the possibility that the claims therein may change and applicant further requests that any resolution in the form of a Terminal Disclaimer in compliance with 37 C.F.R. 1.321(c), if necessary, be deferred until such patent issues

In response, the claims in the co-pending application have not changed and the claims of the instant application are not allowable and therefore the provisional obviousness-type double patenting rejection is maintained.

***Claim Rejections - 35 USC § 103***

Claims 1-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of U. S. Patents 4,927, 627 ('627) and 6,645,476 ('476) and 6,180,118 ('118).

Patent '627 teaches hydrogen peroxide emulsions for bleaching hair. Patent teaches at col.2, lines 34-45 teaches hydrogen peroxide in the form of oil-in-water (o/w) emulsions and at col.3, line 18 teaches the concentration of the hydrogen peroxide, which is the oxidizing agent claimed. Patent at col.2, lines 51-65 teach anionic and nonionic surfactant and mixture of these

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surfactants. See also col.3, lines 8-17. Patent at col.2, lines 56-50 teaches the claimed fatty alcohols and in examples teaches cetyl alcohol claimed. Patent at col.3, under (f) teaches claimed stabilizers and under (g) teaches adding buffer agents so that pH is between 3-5. See examples for additives. Patent '427 at col.1, ll 59-64 teaches adding thickening agent to the compositions. The difference between the patent and the instant application is patent does not teach having amphilic polymer and the hydrophobic unit.

Patent '476 teaches compositions comprising a copolymer wherein one comonomer is acrylamido propyl methyl sulfonic acid (AMPS) or its salts (elected ethylenically unsaturated monomer containing sulfonic group, and one or more macro monomers are chosen from esters of methacrylic acid with alkyl ethoxylates which include 5-80 ethylene oxide units and 10-22 carbon alkyl radicals. See col. 3, lines 23 - 67; See Example 4. Example 2 teaches using NH<sub>3</sub>-neutralized AMPS and Genepol -080, which contains 10-18 carbon fatty alcohol polyglycol ethers with 8 ethylene oxide units. Patent '476 teaches that the degree of neutralization the acids are preferably between 70-100 mol %. See col. 3, lines 8 - 22. Patent '476 also teaches number-average MW of the copolymers, which range from 1000 to 20,000,000 g/mol. See col. 4, lines 9 - 15. Patent '476 also teaches the viscosities of the 1% strength aqueous solutions of the prior art copolymer. Examiner notes that claim 7 is a product-by-process, in which the limitation to the process of making the product will not be considered where the product itself is anticipated by the prior art. See *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Nonetheless, patent '476 teaches that polymer is prepared by free-radical precipitation polymerization in tert-butanol. See col. 4, line 60 through col. 5 line 9. Patent '476 teaches cross-linking the polymers using the claimed cross-linkers, such as methylenebisacrylamide. See col.

4, lines 36 - 29. The reference teaches that the polymers can be random, and that the olefinically unsaturated acids of the polymers can be neutralized by monoalkylammoniums or dialkylammoniums substituted with C1-C22 alkyl radicals. See col. 3, lines 9 - 22; col. 4, lines 9 - 15. Patent '476 particularly teaches using iso (C16-18) fatty alcohol polyglycol ethers with 25 EO units. See col. 3, lines 60 - 64. The claimed molar proportion of the monomer units in instant claims 30-32 are also disclosed in col. 3, line 65 - col. 4, line 8. Example 48 discloses a shampoo composition. The reference teaches method of making topical compositions by incorporating the amphiphilic polymer to the formulations. **Patent under abstract teaches that these polymers are suitable as thickeners.** The difference between the patent and the instant application is patent '476 does not teach oxidizing agent claimed in the instant application.

However patent '118 teaches compositions for bleaching hair using oxidizing agent and amphiphilic polymer (thickener). See the abstract. The amphiphilic polymer of patent '118 shares close structural similarity having the same ethylenically unsaturated monomer and it is cross linked with the cross linking agent and this amphiphilic polymer is also a thickener. See the abstract. See col.5, ll 1-30 for the amphiphilic polymer, which is formed from elected species belonging to olefinically unsaturated monomer and crosslink monomer and this cross linking monomer has hydrophobic portion and it is an acrylate. This monomer has an acrylate unit. See also col.3, ll 5-50. See col.5, ll 33-68 for the oxidizing agent, hydrogen peroxide concentration claimed in claims 43-47. See col.7, ll 8-11 for the stabilizer and see col.5, ll 46-49 for pH. Patent '118 at col.2, ll 33-44 teaches that the amphiphilic polymers are thickeners/gelling agents and these gelling agents when mixed with hydrogen peroxide or an oxidizing compound gives transparent gels. See also example 1 for the concentration of hydrogen peroxide and stabilizer.

Accordingly it would be obvious to one of ordinary skill in the art at the time the invention was made to prepare compositions of '627 and substitute the thickener of '427 with the thickener of '476 and patent '118 also suggests the combination of amphiphilic thickener and oxidizing agent using hydrogen peroxide. One of ordinary skill in the art would have reasonable expectation of success that substituting thickener of '427 with the thickener of '476 would yield the same predictable results and patent '118 clearly suggests that the combination of amphiphilic polymer of '476 and hydrogen peroxide would yield transparent and gel and these gels being stable on storage. This is a prima facie case of obviousness.

***Response to Arguments***

Applicant's arguments filed 3/12/08 have been fully considered but they are not persuasive.

**Applicant's do not address the rejection with respect to primary reference, which is patent 4,927, 627 ('627) instead applicant's argue about patent '476 and '118 and then point out at page 9, why one skilled in the art would not combine '627 patent.**

Applicant's argues:

"First, Applicant notes that the '118 patent teaches cross linked poly (2-acrylamido- 2-methylpropanesulfonic acid) polymers (AMPS polymers) but does not disclose polymers according to the '476 patent for at least the reason that the '118 patent does not disclose AMPS polymers comprising "a hydrophobic moiety which comprises hydrogen or a saturated or unsaturated, linear or branched, aliphatic, cycloaliphatic or aromatic (C1-C30)-hydrocarbon radical." '476 patent at Claim 1, see also Abstract. Applicant also notes that the '118 patent does not

teach polymers according to the present claims for at least the reason that the '118 patent does not disclose AMPS polymers comprising at least one hydrophobic unit comprising from 6 to 50 carbon atoms. See, e.g., present claim 1. Not only does the '118 patent not disclose AMPS polymers according to the '476 patent, it would also be clear to one of ordinary skill in the art that the '476 and '118 patents are directed to polymer particles of vastly different sizes. The '476 patent teaches that in a representative embodiment of its invention, 97.4% of the polymer particles are bigger than 45,000 nm (45 micrometers). Thus, AMPS copolymers according to the '476 patent would be entirely unsuitable for use in compositions according to the '118 patent, which teaches the use of polymer particles no larger than 500 nm. Even if some tiny fraction of AMPS copolymers according to the '476 patent were smaller than 500 nm, AMPS copolymers according to the '476 patent would still fail to display a homogeneous and unimodal size distribution, as required by the '118 patent. Accordingly, one of ordinary skill in the art would recognize that the '118 and '476 patents are directed to polymer particles which differ greatly not only in their chemical nature, but also in their size, and would thus be expected to have different properties. As a result, one of ordinary skill in the art would not consider the polymers of the '118 and '476 patents similar".

In response to the above argument, instant specification at page 4 teaches amphiphilic polymer comprising formula I and at pages 10-11 describes the species corresponding to hydrophobic portion. Patent at col.3, ll 23-64 teaches the preferred water-soluble polymers. Patent '476 does not disclose the claimed formula I, but names the monomer as AMPS. Instant



specification names formula 1 as AMPS. Patent describes the suitable monomers under A, these are same to that described at pages 10-11 of the instant specification. Thus patent '476 teaches the claimed amphiphilic polymers. Patent '118 describes cross linked polymer formed from AMPS and cross linking monomers of formula 2. The combination of formula 1 and 2 of patent '118 satisfies the requirement of patent '476 patent, which disclose AMPS polymers comprising "a hydrophobic moiety which comprises r unsaturated branched (C1-C30)-hydrocarbon radical. Both the patents teach AMPS polymers. Patent '118 at col.5, ll 10-25 teaches the preparation of AMPS polymers, which has both AMPS moiety and also cross linked monomer. Thus the polymers of '476 and '118 share close structural similarity and patent '476 teaches the claimed polymer claimed in the instant application.

Applicant's also argues:

"The Examiner further asserts that "[o]ne of ordinary skill in the art would have reasonable expectation of success that substituting thickener of ['627] with the thickener of '476 would yield the same predictable results and patent '118 clearly suggests that the combination of amphiphilic polymer of '476 and hydrogen peroxide would yield transparent and gel and these gels being stable on storage." Office Action at 8. Applicant respectfully traverses for at least the following reasons.

Applicant submits that the '118 patent would not have provided one of ordinary skill in the art with any expectation for success in combining elements from the '627 and '476 patents since the '118 and '476 patents are directed to dissimilar polymers with divergent properties, as set forth above. In fact, the '118

patent teaches against combining the '627 patent (which is directed to oxidizing compositions) and the '476 patent (which is silent on oxidizing compositions) by teaching that AMPS polymers of use in oxidizing compositions are distinctly different from the AMPS copolymers disclosed by the '476 patent. Furthermore, the combination of elements from the '627 and '118 patents alone would also not enable one of ordinary skill in the art to prepare compositions according to the instant claims since neither of these references teaches or suggests copolymers of AMPS units and hydrophobic units".

In response to the above argument, patent '627 teaches emulsion- form oxidizing preparations for bleaching hair using the conventional oxidizing agent, which is hydrogen peroxide and teaches thickening agent and patent '118 at col.2, ll 33-43 teaches AMPS polymers as thickening agents in oxidizing compositions and patent '476 at col.1, line 17 teaches water soluble polymers as thickeners, therefore one of ordinary skill in the art would prepare compositions of '627 and substitute the thickener of '427 with the thickener of '476. Patent '118 also suggests the combination of amphilic thickener and oxidizing agent using hydrogen peroxide. Known work in the field of hair care art prompts variations of the compositions for use in the same hair care field and these variations are predictable to one of ordinary skill in the art since one of ordinary skill in the art would have reasonable expectation of success that substituting thickener of '427 with the thickener of '476 would yield the same predictable results and patent '118 clearly suggests that the combination of structurally related amphiphilic polymer of '476 and hydrogen peroxide would yield transparent gel and these gels being stable on storage.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

This application contains claims 60-71 drawn to an invention nonelected with traverse in the reply filed on 3/16/07. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JYOTHSNA A. VENKAT whose telephone number is 571-272-0607. The examiner can normally be reached on Monday-Friday, 10:30-7:30: 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MICHAEL WOODWARD can be reached on 571-272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JYOTHSNA A VENKAT /  
Primary Examiner, Art Unit 1615